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EXAMINER

MCLEOD, MARSHALL M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/815,008	Applicant(s) BATRA ET AL.	
	Examiner MARSHALL MCLEOD	Art Unit 2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-15 and 18-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-15 and 18-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action has been issued in response to request for continued examination filed 09 February 2009. Claims 2 and 17 have been cancelled. Claims 1, 3-15, and 18-40 are pending.

Claim Objections

2. Claims 3-6, 10 and 18 are objected to because of the following informalities: Claims 3-6, 10 and 18 depend from a cancelled claim 2. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1, 21, 30, 32, 36-38 and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

5-12. With respect to claims 1 (lines 13-14), 21 (lines 10-11), 30 (lines 10-11), 32 (lines 13-14), 36 (lines 13-14), 37 (lines 12-13), 38 (lines 13-14), 40 (lines 12-13), the limitation "... configured to declare their capabilities to one another" is indefinite. Firstly, it is unclear if it means that each agent is declaring "one", "some/many" or "all" of its capabilities. The problem with this limitation is that the amount of capabilities being declared is vague and indefinite. Secondly, the "configured to" limitation is a type of limitation that is considered as a modifier

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which simply presents the claim as an "intended use". Intended use limitations do not further limit the scope of the claim(s). Limitations that follow these types of modifiers are thus optional and need not be considered or given patentable weight. **See MPEP §§ 2106(II) and 2111.04** Appropriate clarification is required.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claims 1, 3-15, 18-24, 27-29, and 30-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ding et al. (Patent No US 6,691,067 B1), hereinafter Ding, in view of Eder et al. (Pub. No US 2001/0041996 A1), and further in view of Hattori et al. (Patent No US 6,557,025 B1), hereinafter Hattori.**

15. With respect to claim 1, Eder discloses providing an application used to manage an enterprise, the application generating a body of aggregated and summarized information (Page 4; [0041], lines 1-8; i.e. aggregates and stores the transaction data and user input required for completing a valuation), the information being temporally consistent and based on underlying data sets that represent revenues of the enterprise and that are generated or stored at respective locations of the enterprise (Page 3; [0025], lines 1-16), at least some of the data in different ones

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of the data sets being expressed in a manner that is temporally and formally inconsistent, the data of the underlying data sets changing over time (Page 3; [0025], lines 1-16), causing separate each of at least two different executable agents that are associated with respective underlying data sets to perform tasks on data in the associated underlying data set (Page 6; [0056], lines 1-11), to produce processed data, the processed data produced by the different executable agents being expressed in a manner that is formally consistent, temporally consistent, and current with respect to the information to be provided through the application used to manage an enterprise (Page 6; [0056], lines 23-27).

Eder does not disclose the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another; delivering the processed data among the agents to enable assembly of the body of aggregated and summarized information that is provided through the application used to manage an enterprise, based on the processed data, to be used to manage aspects of the enterprise.

However, Ding discloses delivering the processed data among the agents to enable assembly of the body of aggregated and summarized information that is provided through the application used to manage an enterprise, based on the processed data, to be used to manage aspects of the enterprise (Column 2, lines 54-64).

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It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding with the teachings of Eder in order to efficiently collect, process and summarize different types of data for a user.

The combined teachings of Eder and Ding do not disclose the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another.

However, Hattori discloses the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another (Column 13, lines 28-34; i.e. discloses notifications which the examiner interprets as declaring file handling/communication capabilities to another agent so that the other agent may understand and receive the notification that is being sent).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the combined teachings of Eder and Ding with the teachings of Hattori in order to allow for easy and uniformed file transfer and communication so that each agent can process whatever file or notification is being sent by another agent.

16. With respect to claim 3, it is rejected for the same reasons as claim 2 above. In addition, Ding as modified discloses the agents have ports to send (Column 7, lines 22-24) and receive the processed data (Column 7, lines 39-44).

17. With respect to claim 4, it is rejected for the same reasons as claim 2 above. In addition, Ding as modified discloses at least some of the processed data pass through routing devices between agents (Column 22, lines 1-4).

18. With respect to claim 5, it is rejected for the same reasons as claim 2 above. In addition, Ding as modified discloses routing devices comprising hubs, routers, and gateways (Column 22, lines 1-4).

19. With respect to claim 6, it is rejected for the same reasons as claim 2 above. In addition, Ding as modified discloses agents are part of a network that conforms to the network model and includes network links to deliver the processed data (Column 2, lines 44-59).

20. With respect to claim 7, it is rejected for the same reasons as claim 6 above. In addition, Ding as modified discloses at least some of the links are temporary (Column 5, lines 59-64,.ie. not connected through a LAN but connected via the internet, which is a temporary connection).

21. With respect to claim 8, it is rejected for the same reasons as claim 6 above. In addition, Ding as modified discloses that the temporary links define a dynamically configured network that conforms to the network model (Column 5, lines 59-64, ie. not connected through a LAN but connected via the internet, which is a temporary dynamically configured network connection).

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22. With respect to claim 9, it is rejected for the same reasons as claim 6 above. In addition, Ding as modified g discloses some of the links are persistent (Column 5, lines 59-64,.ie. not connected through a LAN but connected via the internet which uses persistent links to connect users to various data/databases).

23. With respect to claim 10, it is rejected for the same reasons as claim 2 above. In addition, Ding as modified discloses a group of the agents operate in a subnetwork that conforms to the network model, and the subnetwork comprises a portion of a network that conforms to the network model (Column 5, lines 29-31).

24. With respect to claim 11, it is rejected for the same reasons as claim 10 above. In addition, Ding as modified discloses another instance of the subnetwork comprises a portion of another network that conforms to the network model (Column 5, lines 29-31).

25. With respect to claim 12, it is rejected for the same reasons as claim 1 above. In addition, Ding as modified discloses he agents are distributed (Figure 1; Column 5, lines 31-33).

26. With respect to claim 13, it is rejected for the same reasons as claim 1 above. In addition, Ding as modified discloses agents are distributed at least in part geographically (Column 5, lines 62-64).

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27. With respect to claim 14, it is rejected for the same reasons as claim 1 above. In addition, Ding as modified discloses at least some of the associated information is stored in databases (Column 7, lines 22-28).

28. With respect to claim 15, it is rejected for the same reasons as claim 1 above. In addition, Ding as modified discloses at least some of the processed data comprise events (Column 7, lines 39-44).

29. With respect to claim 18, it is rejected for the same reasons as claim 1 above. In addition, Ding as modified discloses agents comprise at least part of a network that conforms to the network model and a process external to the network makes requests to the network for at least portions of the processed data for use in assembling the body of aggregated and summarized information (Column 7, lines 37-42).

30. With respect to claim 19, it is rejected for the same reasons as claim 18 above. In addition, Ding as modified discloses the external process comprises an expert engine (Column 7, lines 28-36).

31. With respect to claim 20, it is rejected for the same reasons as claim 19 above. In addition, Ding as modified discloses the expert engine is driven by a model (Column 8, lines 12-19).

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32. With respect to claim 21, Eder discloses providing an application used to manage an enterprise, the application generating a body of aggregated and summarized information (Page 4; [0041], lines 1-8; i.e. aggregates and stores the transaction data and user input required for completing a valuation), the information being temporally consistent and based on underlying data sets that represent revenues of the enterprise and that are generated or stored at respective locations of the enterprise (Page 3; [0025], lines 1-16), at least some of the data in different ones of the data sets being expressed in a manner that is temporally and formally inconsistent, the data of the underlying data sets changing over time (Page 3; [0025], lines 1-16).

Eder does not disclose from the repositories of data related to an enterprise, obtaining current data to be used in connection with managing aspects of the enterprise, the current data provided by a plurality of agents being organized in accordance with a network model and being configured to declare their capabilities to one another, enhancing the formal consistency of the current data received from different ones of the repositories, temporarily storing portions of the enhanced current data to enhance temporal consistency of the current data, using a model of the portion of the enterprise to analyze the temporally and formally enhanced current data and to generate resulting management data, and distributing the management data in a time frame that is current relative to the current data obtained from the repositories, the identity of the current data of the data sets changing adaptively over time based on the model and on the resulting management data that is to be distributed.

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However, Ding discloses from the repositories of data related to an enterprise, obtaining current data to be used in connection with managing aspects of the enterprise (Column 7, lines 37-42), enhancing the formal consistency of the current data received from different ones of the repositories (Column 14, lines 57-65), temporarily storing portions of the enhanced current data to enhance temporal consistency of the current data (Column 12, lines 13-21, i.e. often different metrics are not updated at the same time), using a model of the portion of the enterprise to analyze the temporally and formally enhanced current data and to generate resulting management data (Column 11, lines 19-30), and distributing the management data in a time frame that is current relative to the current data obtained from the repositories (Column 7, lines 63-67 continued through Column 8, lines 12-19), the identity of the current data of the data sets changing adaptively over time based on the model and on the resulting management data that is to be distributed (Column 3, lines 47-56).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding with the teachings of Eder in order to efficiently collect, process and summarize different types of data for a user.

The combined teachings of Eder and Ding do not disclose the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another.

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However, Hattori discloses the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another (Column 13, lines 28-34; i.e. discloses notifications which the examiner interprets as declaring file handling/communication capabilities to another agent so that the other agent may understand and receive the notification that is being sent).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the combined teachings of Eder and Ding with the teachings of Hattori in order to allow for easy and uniformed file transfer and communication so that each agent can process whatever file or notification is being sent by another agent.

33. With respect to claim 22, it is rejected for the same reasons as claim 21 above. In addition, Ding as modified discloses current data is pulled from the repositories (Column 7, lines 5-7).

34. With respect to claim 23, it is rejected for the same reasons as claim 21 above. In addition, Ding as modified discloses current data is pushed from the repositories (Column 7, lines 22-24).

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35. With respect to claim 24, it is rejected for the same reasons as claim 21 above. In addition, Ding as modified discloses storing the management data for later use (Column 9, lines 53-61).

36. With respect to claim 25, Ding does not disclose that the management data is distributed by notification to a process that uses the data. However, Hattori discloses that the management data is distributed by notification to a process that uses the data (Column 13, lines 24-34). It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding which discloses that the management data is distributed by the user, with the teachings of Hattori which discloses that the management section of the remote node sends notification, in order to distribute the management data without the user specifying a destination.

37. With respect to claim 26, Ding does not disclose that the management data is distributed by automated delivery of the data to a process. However, Hattori discloses that the management data is distributed by automated delivery of the data to a process (Column 18, lines 48-54). It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding which discloses that the management data is distributed by the user, with the teachings of Hattori which discloses that distributed and updated automatically or manually, in order to have each process up to date with any changes made to the management data.

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38. With respect to claim 27, it is rejected for the same reasons as claim 21 above. In addition, Ding as modified discloses the current data is obtained in response to a need for the resulting management data to be distributed (Column 3, lines 48-57).

39. With respect to claim 28, it is rejected for the same reasons as claim 21 above. In addition, Ding as modified discloses the current data is obtained at a time based on when the resulting management data is to be distributed (Ding, Abstract, lines 10-13 i.e. that the metric data is continually collected over the course of a measurement interval, regularly placed into a registry of metrics, and then periodically sampled from the registry indirectly).

40. With respect to claim 29, it is rejected for the same reasons as claim 21 above. In addition, Ding as modified discloses the identity of the current data that is obtained is based on the identity of the management data that is to be distributed (Ding, Column 10, lines 57-62).

41. With respect to claim 30, Eder discloses providing an application used to manage an enterprise, the application generating a body of aggregated and summarized information (Page 4; [0041], lines 1-8; i.e. aggregates and stores the transaction data and user input required for completing a valuation), the information being temporally consistent and based on underlying data sets that represent revenues of the enterprise and that are generated or stored at respective locations of the enterprise (Page 3; [0025], lines 1-16), at least some of the data in different ones of the data sets being expressed in a manner that is temporally and formally inconsistent, the data of the underlying data sets changing over time (Page 3; [0025], lines 1-16).

Eder does not disclose processing enterprise data from distributed the repositories in an assembly line fashion to produce management data that is useful in managing at least a portion aspects of the enterprise, the assembly line including at least two separate executable agents to perform tasks on the data, the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another, the agents including: a cleansing agent to process data that would not otherwise be useful in producing the management data, a normalizing agent to normalize the data, a transformation agent to enhance the consistency of the data an assembler agent to assemble data to form the management data, and a staging agent to form and stage data for further processing, the sequence and tasks of the agents in the pipeline being adaptable to changes in the aspect of the enterprise being managed.

However, Ding discloses processing data from the repositories in an assembly line fashion to produce management data that is useful in managing aspects of the enterprise (Column 7, lines 5-7), the assembly line including at least two separate executable agents to perform tasks on the data, the agents including (Column 6, lines 29-36): a cleansing agent to process data that would not otherwise be useful in producing the management data (Column 2, lines 63-64; Using the sampled metric data to build performance models for analysis and capacity planning i.e., Sampling only data that is going to be useful in producing the management data and ignoring or discarding what is not sampled), a normalizing agent to normalize the data (Column 10, lines 29-36), a transformation agent to enhance the consistency of the data (Column 10, lines 42-45) an assembler agent to assemble data to form the management data (Column 10, lines 36-38), and a

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staging agent to form and stage data for further processing (Column 10, lines 47-49, continued through Column 11, lines 19-21), the sequence and tasks of the agents in the pipeline being adaptable to changes in the aspect of the enterprise being managed (Column 11, lines 33- 35).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding with the teachings of Eder in order to efficiently collect, process and summarize different types of data for a user.

The combined teachings of Eder and Ding do not disclose the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another.

However, Hattori discloses the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another (Column 13, lines 28-34; i.e. discloses notifications which the examiner interprets as declaring file handling/communication capabilities to another agent so that the other agent may understand and receive the notification that is being sent).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the combined teachings of Eder and Ding with the teachings of Hattori in order to allow for easy and uniformed file transfer and communication so that each agent can process whatever file or notification is being sent by another agent.

42. With respect to claim 31, Eder discloses providing an application used to manage an enterprise, the application generating a body of aggregated and summarized information (Page 4; [0041], lines 1-8; i.e. aggregates and stores the transaction data and user input required for completing a valuation), the information being temporally consistent and based on underlying data sets that represent revenues of the enterprise and that are generated or stored at respective locations of the enterprise (Page 3; [0025], lines 1-16), at least some of the data in different ones of the data sets being expressed in a manner that is temporally and formally inconsistent, the data of the underlying data sets changing over time (Page 3; [0025], lines 1-16).

Eder does not disclose storing and updating, in a cube, multi-dimensional current data obtained from the data sets about an aspect of an enterprise, storing, in a cube, data defining relationships between metrics used to manage an aspect of the enterprise and the multi-dimensional current data, storing, in a cube, metadata about the multi-dimensional current data, and using the cubes to access current data in responding to queries, to generate the information useful in managing the aspect of the enterprise.

However, Ding disclose storing and updating, in a cube, multi-dimensional current data obtained from the data sets about an aspect of an enterprise (Column 12, lines 11-18), storing, in a cube, data defining relationships between metrics used to manage an aspect of the enterprise and the multi-dimensional current data (Column 6, lines 38-41), storing, in a cube, metadata about the multi-dimensional current data, and using the cubes to access current data in responding to

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queries, to generate the information useful in managing the aspect of the enterprise (Column 10, lines 33-45).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding with the teachings of Eder in order to efficiently collect, process and summarize different types of data for a user.

43. With respect to claim 32, Eder discloses providing an application used to manage an enterprise, the application generating a body of aggregated and summarized information (Page 4; [0041], lines 1-8; i.e. aggregates and stores the transaction data and user input required for completing a valuation), the information being temporally consistent and based on underlying data sets that represent revenues of the enterprise and that are generated or stored at respective locations of the enterprise (Page 3; [0025], lines 1-16), at least some of the data in different ones of the data sets being expressed in a manner that is temporally and formally inconsistent, the data of the underlying data sets changing over time (Page 3; [0025], lines 1-16).

Eder does not disclose accumulating processed data about an enterprise from the data sets using at least two separate executable agents organized in a network model, the processed data that are accumulated being determined by predefined analytical processes that are associated with functional aspects of the enterprise and that use the processed data to produce functional information about the enterprise, the enterprise belonging to a class of enterprises, the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another; and processing the functional information to produce the

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management information using the application, the application being reusable for other enterprises belonging to the class.

However, Ding discloses accumulating processed data about an enterprise from the data sets using at least two separate executable agents organized in a network model (Column 6, lines 63-67, continued through Column 7, lines 1-15), the processed data that are accumulated being determined by predefined analytical processes that are associated with functional aspects of the enterprise and that use the processed data to produce functional information about the enterprise (Column 6, lines 63-67, continued through Column 7, lines 1-15), the enterprise belonging to a class of enterprises (Column 6, lines 63-67, continued through Column 7, lines 1-15), and processing the functional information to produce the management information using the application, the application being reusable for other enterprises belonging to the class (Column 7, lines 5-14).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding with the teachings of Eder in order to efficiently collect, process and summarize different types of data for a user.

The combined teachings of Eder and Ding do not disclose the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another.

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However, Hattori discloses the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another (Column 13, lines 28-34; i.e. discloses notifications which the examiner interprets as declaring file handling/communication capabilities to another agent so that the other agent may understand and receive the notification that is being sent).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the combined teachings of Eder and Ding with the teachings of Hattori in order to allow for easy and uniformed file transfer and communication so that each agent can process whatever file or notification is being sent by another agent.

44. With respect to claim 33, it is rejected for the same reasons as claim 32 above. In addition, Ding as modified discloses the class comprises manufacturers (Column 10, lines 11-28).

45. With respect to claim 34, it is rejected for the same reasons as claim 32 above. In addition, Ding as modified discloses the class comprises financial services enterprises (Column 10, lines 33-42).

46. With respect to claim 35, it is rejected for the same reasons as claim 32 above. In addition, Ding as modified discloses the functional aspects include at least one of financial,

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supply chain, information technology, and sales (Column 10, lines 33-42; Column 10, lines 11-28).

47. With respect to claim 36, Eder discloses a physical article or object constituting a machine or manufacture and bearing instructions to cause a machine to (Column 23, Claim 2, lines 1-3): provide an application generating a body of aggregated and summarized information (Page 4; [0041], lines 1-8; i.e. aggregates and stores the transaction data and user input required for completing a valuation), the information being temporally consistent and based on underlying data sets that represent revenues of the enterprise and that are generated or stored at respective locations of the enterprise (Page 3; [0025], lines 1-16), at least some of the data in different ones of the data sets being expressed in a manner that is temporally and formally inconsistent, the data of the underlying data sets changing over time (Page 3; [0025], lines 1-16).

Eder does not disclose cause each of at least two different executable agents that are associated with respective data sets to perform tasks on data in the associated data set, to produce processed data, the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another; and deliver the processed data among agents to enable assembly of the body of aggregated management information that is provided through the application used in managing enterprises, based on the processed data, to be used to manage aspects of the enterprise.

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However, Ding discloses a cause each of at least two different executable agents that are associated with respective data sets to perform tasks on data in the associated data set, to produce processed data (Column 2, lines 51-54), and deliver the processed data among agents to enable assembly of the body of aggregated management information that is provided through the application used in managing enterprises (Column 2, lines 54-64), based on the processed data, to be used to manage aspects of the enterprise (Column 2, lines 54-64).

The combined teachings of Eder and Ding do not disclose the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another.

However, Hattori discloses the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another (Column 13, lines 28-34; i.e. discloses notifications which the examiner interprets as declaring file handling/communication capabilities to another agent so that the other agent may understand and receive the notification that is being sent).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the combined teachings of Eder and Ding with the teachings of Hattori in order to allow for easy and uniformed file transfer and communication so that each agent can process whatever file or notification is being sent by another agent.

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48. With respect to claim 37, Eder discloses a physical article or object constituting a machine or manufacture and bearing instructions to cause a machine to (Column 23, Claim 2, lines 1-3): provide an application generating a body of aggregated and summarized information (Page 4; [0041], lines 1-8; i.e. aggregates and stores the transaction data and user input required for completing a valuation), the information being temporally consistent and based on underlying data sets that represent revenues of the enterprise and that are generated or stored at respective locations of the enterprise (Page 3; [0025], lines 1-16), at least some of the data in different ones of the data sets being expressed in a manner that is temporally and formally inconsistent, the data of the underlying data sets changing over time (Page 3; [0025], lines 1-16).

Eder does not disclose from the repositories of data related to an enterprise, obtain current data to be used in connection with managing aspects of the enterprise, the current data being provided by a plurality of agents being organized in accordance with a network model and being configured to declare their capabilities to one another; enhance the formal consistency of the current data received from different ones of the repositories, temporarily storing portions of the enhanced current data to enhance temporal consistency of the current data, use a model of the portion of the enterprise to analyze the temporally and formally enhanced current data and to generate resulting management data, and distribute the management data in a time frame that is current relative to the current data obtained from the repositories, changing the identity of the current data of the data sets adaptively over time based on the model and on the resulting management data that is to be distributed.

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However, Ding discloses from the repositories of data related to an enterprise, obtain current data to be used in connection with managing aspects of the enterprise (Column 12, lines 12-21), enhance the formal consistency of the current data received from different ones of the repositories (Column 14, lines 57-65), temporarily storing portions of the enhanced current data to enhance temporal consistency of the current data (Column 12, lines 13-21, i.e. often different metrics are not updated at the same time), use a model of the portion of the enterprise to analyze the temporally and formally enhanced current data and to generate resulting management data (Column 11, lines 19-30), and distribute the management data in a time frame that is current relative to the current data obtained from the repositories (Column 7, lines 63-67 continued through Column 8, lines 12-19), changing the identity of the current data of the data sets adaptively over time based on the model and on the resulting management data that is to be distributed (Column 3, lines 47-56).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding with the teachings of Eder in order to efficiently collect, process and summarize different types of data for a user.

The combined teachings of Eder and Ding do not disclose the current data being provided by a plurality of agents being organized in accordance with a network model and being configured to declare their capabilities to one another.

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However, Hattori discloses the current data being provided by a plurality of agents being organized in accordance with a network model and being configured to declare their capabilities to one another (Column 13, lines 28-34; i.e. discloses notifications which the examiner interprets as declaring file handling/communication capabilities to another agent so that the other agent may understand and receive the notification that is being sent).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the combined teachings of Eder and Ding with the teachings of Hattori in order to allow for easy and uniformed file transfer and communication so that each agent can process whatever file or notification is being sent by another agent.

49. With respect to claim 38, Eder discloses a physical article or object constituting a machine or manufacture and bearing instructions to cause a machine to (Column 23, Claim 2, lines 1-3): provide an application used to manage an enterprise, the application generating a body of aggregated and summarized information (Page 4; [0041], lines 1-8; i.e. aggregates and stores the transaction data and user input required for completing a valuation), the information being temporally consistent and based on underlying data sets that represent revenues of the enterprise and that are generated or stored at respective locations of the enterprise (Page 3; [0025], lines 1-16), at least some of the data in different ones of the data sets being expressed in a manner that is temporally and formally inconsistent, the data of the underlying data sets changing over time (Page 3; [0025], lines 1-16).

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Eder does not disclose process data from the repositories in an assembly line fashion to produce management data that is useful in managing aspects of the enterprise, the assembly line including at least two separate executable agents to perform tasks on the data, the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another, the agents including: a cleansing agent to process data that would not otherwise be useful in producing the management data, a normalizing agent to normalize the data, a transformation agent to enhance the consistency of the data, an assembler agent to assemble data to form the management data, and a staging agent to form and stage data for further processing, the sequence and tasks of the agents in the pipeline being adaptable to changes in the aspect of the enterprise being managed.

However, Ding discloses a process data from the repositories in an assembly line fashion to produce management data that is useful in managing aspects of the enterprise (Column 7, lines 5-7), the assembly line including at least two separate executable agents to perform tasks on the data, the agents including (Column 6, lines 29-36):

- a. a cleansing agent to process data that would not otherwise be useful in producing the management data (Column 2, lines 63-64; Using the sampled metric data to build performance models for analysis and capacity planning i.e. , Sampling only data that is going to be useful in producing the management data and ignoring or discarding what is not sampled),
- b. a normalizing agent to normalize the data (Column 10, lines 29-36),

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- c. a transformation agent to enhance the consistency of the data (Column 10, lines 42-45),
- d. an assembler agent to assemble data to form the management data (Column 10, lines 36-38), and
- e. a staging agent to form and stage data for further processing (Column 10, lines 47-49, continued through Column 11, lines 19-21); and
- f. the sequence and tasks of the agents in the pipeline being adaptable to changes in the aspect of the enterprise being managed (Column 11, lines 33-35).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding with the teachings of Eder in order to efficiently collect, process and summarize different types of data for a user.

The combined teachings of Eder and Ding do not disclose the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another.

However, Hattori discloses the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another (Column 13, lines 28-34; i.e. discloses notifications which the examiner interprets as declaring file handling/communication capabilities to another agent so that the other agent may understand and receive the notification that is being sent).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the combined teachings of Eder and Ding with the teachings of Hattori in order to allow for easy and uniformed file transfer and communication so that each agent can process whatever file or notification is being sent by another agent.

50. With respect to claim 39, Eder discloses a physical article or object constituting a machine or manufacture and bearing instructions to cause a machine to (Column 23, Claim 2, lines 1-3): provide an application used to manage an enterprise, the application generating a body of aggregated and summarized information (Page 4; [0041], lines 1-8; i.e. aggregates and stores the transaction data and user input required for completing a valuation), the information being temporally consistent and based on underlying data sets that represent revenues of the enterprise and that are generated or stored at respective locations of the enterprise (Page 3; [0025], lines 1-16), at least some of the data in different ones of the data sets being expressed in a manner that is temporally and formally inconsistent, the data of the underlying data sets changing over time (Page 3; [0025], lines 1-16).

Eder does not disclose store and update, in a cube, multi-dimensional current data obtained from the data sets about an aspect of an enterprise, store, in a cube, data defining relationships between metrics used to manage an aspect of the enterprise and the multi-dimensional current data, store, in a cube, metadata about the multi-dimensional current data, and use the cubes to

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access current data in responding to queries, to generate the information useful in managing the aspect of the enterprise.

However, Ding discloses storing and updating, in a cube, multi-dimensional current data obtained from the data sets about an aspect of an enterprise (Column 12, lines 11-18), store, in a cube, data defining relationships between metrics used to manage an aspect of the enterprise and the multi-dimensional current data (Column 6, lines 38-41), store, in a cube, metadata about the multi-dimensional current data; and use the cubes to access current data in responding to queries, to generate the information useful in managing the aspect of the enterprise (Column 10, lines 33-45).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding with the teachings of Eder in order to efficiently collect, process and summarize different types of data for a user.

51. With respect to claim 40, Eder discloses a physical article or object constituting a machine or manufacture and bearing instructions to cause a machine to (Column 23, Claim 2, lines 1-3): provide an application used to manage an enterprise, the application generating a body of aggregated and summarized information (Page 4; [0041], lines 1-8; i.e. aggregates and stores the transaction data and user input required for completing a valuation), the information being temporally consistent and based on underlying data sets that represent revenues of the enterprise and that are generated or stored at respective locations of the enterprise (Page 3;

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[0025], lines 1-16), at least some of the data in different ones of the data sets being expressed in a manner that is temporally and formally inconsistent, the data of the underlying data sets changing over time (Page 3; [0025], lines 1-16).

Eder does not disclose accumulating processed data about an enterprise from the data sets using at least two separate executable agents organized in a network model, the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another, the processed data that are accumulated being determined by predefined analytical processes that are associated with functional aspects of the enterprise and that use the processed data to produce functional information about the enterprise, the enterprise belonging to a class of enterprises, and process the functional information to produce the management information using the application, the application being reusable for other enterprises belonging to the class.

However, Ding discloses accumulating processed data about an enterprise from the data sets using at least two separate executable agents organized in a network model, the processed data that are accumulated being determined by predefined analytical processes that are associated with functional aspects of the enterprise and that use the processed data to produce functional information about the enterprise, the enterprise belonging to a class of enterprises (Column 6, lines 63-67, continued through Column 7, lines 1-15), and process the functional information to produce the management information using the application, the application being reusable for other enterprises belonging to the class (Column 7, lines 5-14).

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It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the teachings of Ding with the teachings of Eder in order to efficiently collect, process and summarize different types of data for a user.

The combined teachings of Eder and Ding do not disclose the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another.

However, Hattori discloses the executable agents being organized in accordance with a network model and being configured to declare their capabilities to one another (Column 13, lines 28-34; i.e. discloses notifications which the examiner interprets as declaring file handling/communication capabilities to another agent so that the other agent may understand and receive the notification that is being sent).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the combined teachings of Eder and Ding with the teachings of Hattori in order to allow for easy and uniformed file transfer and communication so that each agent can process whatever file or notification is being sent by another agent.

Response to Arguments

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52. Applicant's arguments with respect to claims 1, 3-15, and 18-40 have been considered but are not persuasive.

53. With respect to applicant's argument on page 16 of the instant argument's. Applicant's contends that "Eder does not disclose delivering the processed data among the agent" the examiner agrees and states as much in the office action. However, the rejection given for the claim is a 35 U.S.C. 103(a) rejection and the prior art Ding was brought in to cure the deficiencies of Eder, see (Ding, Column 2, lines 54-64). As such the combined teachings of Eder and Ding should be taken as a whole and not in a piecemeal fashion when looking at the rejection given for the claims.

54. With respect to applicant's argument on page 17 of the instant argument's. Applicant's contends that "the portion of Hattori cited in the Office Action does not disclose or suggest the idea that agents conform to the network model and declare their capabilities to one another. Hattori merely mentions that agents can cooperate with each other using a standard inter-agent cooperation technique." The examiner respectfully disagrees and state to applicant's that the cited portion in Hattori (Column 18, lines 42-48) discloses agents communicating over a network. Furthermore, because applicant's did not specify what type of network or network model they rely upon, the cited portion of the prior art Hattori reads on applicant's claim limitation as all networks can be classified as a specific type of network and conform to a network model. Next, applicant's contend that Hattori does not disclose that the agents declare their capabilities to one another. The examiner respectfully disagrees and states to applicant's

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that the cited portion in Hattori (Column 18, lines 42-48) discloses agents communicating/cooperating over a network. Hattori teaches agents exchanging information over a network which reads on applicant's limitation of agents declaring their capabilities to one another. Hattori reads on this limitation by having its agents being able to accept and process sent data requests (i.e. agents declare their communication capability to send files and data requests) from other agents through the use of the network. Furthermore, because applicant's did not specify what type of capabilities the agents are declaring the cited portion of the prior art reads on applicant's claim.

55. With respect to applicant's argument on page 19 of the instant argument's. Applicant's contends that "the portion of Hattori cited in the Office Action does not disclose or suggest "storing and updating, in a cube, multi- dimensional current data" or "storing, in a cube, data defining relationships between metrics" or "storing, in a cube, metadata about the multi-dimensional current data" or "using the cubes to access current data in responding to queries". The examiner respectfully disagrees and refers applicant's to the cited portion (Column 12, lines 10-20) in the prior art which applicant's quoted as stating "... continually monitor one or more elements of the computer system and collect raw metric data relating to system performance, preferably at a high frequency. The **metric data is written to a memory and periodically updated. The memory is preferably a registry of metrics.** . ." As disclosed in a prior paragraph in Hattori (Column 9, lines 31-38) which discloses "the Collect Registry Queue 340, Metric Repository 350, Metric Repository Pool 352, input queues 322a, 322b, 322c, 322d, 322e, and 322f, and Universal Data Repository (UDR) history files 210a, 210b, 210c, and 210d

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comprise a data structure called a base queue or BASEQ.” The data structure disclosed in Hattori which is used to store metric data reads on applicant’s data structure (i.e. **Cube**) which is also used to store metric data.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARSHALL MCLEOD whose telephone number is (571)270-3808. The examiner can normally be reached on Monday - Thursday 6:30 a.m-4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ramy M Osman/
Primary Examiner, Art Unit 2457

Marshall McLeod
Art Unit 2457
4/28/2009